

ABSTRACT OF THE DISCLOSURE

5 A semiconductor device has a surge protection circuit electrically connected to a signal input terminal and including a diode and a transistor. The diode has its cathode region constituted of an n^+ diffusion layer, an n^- epitaxial layer, an n -type diffusion layer and an n^+ diffusion layer. The n^+ diffusion layer is electrically connected to a conductive layer and formed at a main surface of a semiconductor substrate. The n^+ diffusion layer constitutes, together with a p -type diffusion layer, a pn junction where Zener breakdown occurs, and the pn junction with the Zener breakdown occurring therein is distant from a field oxide film. Then, the
10 semiconductor device with the surge protection circuit without suffering from current leakage and thus normally operating can be achieved.